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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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2100 PENNSYLVANIA AVENUE NW
WASHINGTON DC 20037-3202

EXAMINER

THLANG, E

ART UNIT	PAPER NUMBER
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2781

DATE MAILED: 10/15/99

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/124,052

Applicant(s)

Na, Seong-Wuk

Examiner

Eric S. Thlang

Group Art Unit

2781



☒ Responsive to communication(s) filed on Jul 29, 1998

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-6 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-6 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☒ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Part III DETAILED ACTION

1. Claims 1-6 are presented for examination.

Informalities - Objections

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
3. To insure proper consideration and to the extent required by 37 CFR 1.56, applicant is required to supply a copy of the publication reference cited in the specification because it is not readily available to the examiner (e.g., see 1).

Claim Rejections - 35 U.S.C. § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and

invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-6 are rejected under 35 U.S.C. § 103 as being unpatentable over Rao et al. (U.S. 5,159,272) in view of Nguyen (U.S. 5,797,089).

6. As per independent claims 1 and 5, Rao et al. teaches a power management method [see figure 3] for a personal digital assistant (PDA) which can be connected with an external communication terminal, comprising the steps of comparing said battery voltage with a reference voltage, said reference voltage being slightly higher than an inoperable voltage of said PDA; [see figure 3, element 51; col. 8, lines 66-67; col. 9, lines 1-24]; generating a low-voltage alarm message [see figure 3, elements 49, 13, 53A] when said battery voltage is lower than said reference voltage; and supplying electric power to said external communication terminal [see figure 3, elements, 51, 55].

7. Rao et al. does not explicitly teaches a power management method for a personal digital assistant terminal, comprising the step of upon detecting power-on of said external communication terminal, detecting a battery voltage of said PDA. Nguyen (5797089) teaches a power management method [see figure 3, elements 36, 37] for a personal digital assistant [see figure 3, element 31] terminal, comprising the step of upon detecting power-on of said external communication terminal, detecting a battery voltage of said PDA [see figure 3, element 35; figure 4, elements 61, 65].

8. Rao et al. and Nguyen are combinable as being from similar field of endeavor and similar problem solving area. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Nguyen within the system of Rao et al. because the object of Nguyen's teachings is to provide power efficiency usage in communication network with other portable devices and better performing in transmitting, receiving, and displaying text or images.

9. As per claim 2, Rao et al. teaches all claimed limitation as applied to claims above. Furthermore, Rao et al. teaches comparing said battery voltage with an inoperable voltage threshold of PDA; and setting said PDA to sleep mode when said battery voltage is lower than said inoperable voltage [see col. 12, lines 30-46; figure 3, elements 45, 47; figure 4, element 138].

10. As per claims 3 and 6, Rao et al. teaches all claimed limitation as applied to claims above. Furthermore, Rao et al. teaches calculating a difference voltage between said battery voltage and a voltage drop according to a power consumption of external terminal [see col. 3, lines 31-52; col. 5, lines 7-33].

11. As per claim 4, Rao et al. teaches all claimed limitation as applied to claims above. Furthermore, Rao et al. teaches alarm message is generated through at least one of a display and a speaker [see figure 3, elements 53A, 54].

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The references are cited in the Form PTO-892 for the applicant's review.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric S. Thlang whose telephone number is (703) 305-4004. The examiner can normally be reached on Monday - Thursday from 7:00 a.m. to 4:30 p.m. The examiner can also be reached on alternate Fridays during the same hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh, can be reached on (703) 305-9648. The fax phone number for this Group is (703) 308-9051 or (703) 308-9052.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [**Ayza.Sheikh@uspto.gov**].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.



THLANG, Eric S.
October 8, 1999



AYAZ R. SHEIKH
SUPERVISORY PATENT EXAMINER
GROUP 2700